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10/555,956	11/07/2005	Martin Krumpelmann	P70882US0	9440
136 7590 04/29/2008 JACOBSON HOLMAN PLLC 400 SEVENTH STREET N.W. SUITE 600 WASHINGTON, DC 20004			EXAMINER CHEN, YUAN L	
			ART UNIT 4193	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/555,956	Applicant(s) KRUMPELMANN ET AL.	
	Examiner Yuan L. Chen	Art Unit 4193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/21/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 17 is/are rejected.
- 7) ☒ Claim(s) 6,8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 6 is objected to because of the following informalities: “read out” in the last 3rd line of page 11 should be eliminated.

Claim 8 is objected to because of the following informalities: “one” in line 4 should be eliminated.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 – 4 and 6 – 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ikeda et al. (EP 1205300A1).

With respect to newly amended Claim 1, Ikeda et al. disclose in Figs. 3, 8 and 9 a color rotary printing machine, comprising:

- one printing plate support (73) each is assigned to colors to be transferred on to a printing plate, said plate support (73) supporting a printing plate,

- said printing plate support (73) being attached to a mandrel or cylinder (72) of a rotary printing machine in order to transfer the printing image onto the printing substrate (93),
- register devices (4, 5) that determine positions of the printing plates with respect to one another,
- the register devices (4, 5) including sensors (4, 91) that determine positions of the printing plate support in the printing machine,
- the register devices (4, 5) providing information regarding the position of the printing plate support before, or at the start of, or during the print process in conjunction with the sensors (4, 91),
- based on which control signals are provided (Column 8 Lines 27 – 33),
- the register device (4, 5) including a control device (5) with which control signals are generated based on the positions of the printing plate support determined by the sensors (4, 91) with which drives (84) of the mandrels or the print cylinder (72) are controllable using said control signals in such a manner that a phase position of the mandrels or the print cylinder (72) in relation to one another is changed,
- a register accuracy of the print increases (Column 3 Line 27),
- each printing plate support including at least one information carrier (90) from which information is removed using the sensor (4, 91), the information that is read out being automatically suitable for determining the relative position of

- the printing plate support on the mandrel or on the print cylinder of a rotary printing machine (Column 8 Line 27 – 33), and
- the information carrier (90) being arranged outside the printing mandrel and
 - between the print image and an edge of the printing plate support that is turned toward a front end of the mandrel or of the print cylinder (73).

Ikeda et al. teach all the limitations of Claim 1.

With respect to newly amended Claim 2, Ikeda et al. teach all the limitations of Claim 2 (in Fig. 9 of Ikeda et al.): the multi-color rotary printing machine according to claim 1, wherein the information carrier (90) has an oblong shape whereby its long side that is essentially aligned in a peripheral direction of the printing plate support.

With respect to newly amended Claims 3 and 9, Ikeda et al. teach all the limitations of Claims 3 and 9 (in Fig. 9 of Ikeda et al.): the multi-color rotary printing machine according to claim 1, wherein the information carrier (90) surrounds a periphery of the mandrel or of the cylinder (73) of the printing machine.

With respect to newly amended Claims 4 and 10 - 11, Ikeda et al. teach all the limitation of Claims 4 and 10 - 11 (in Fig. 9 of Ikeda et al.): the multi-color rotary printing machine, wherein the information stored on the information carrier (90) is read out optically, magnetically or electromagnetically.

With respect to newly amended Claim 6, Ikeda et al. teach all the limitation of Claim 6 (in Figs 3, and 8 - 9 of Ikeda et al.): process for setting up a multi-color rotary printing machine before and at start of a print process, comprising:

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- assigning one printing plate support (73) each to the colors to be transferred on to a printing substrate (93), said plate support (73) supporting a printing plate;
- attaching the printing plate supports (73) to mandrel or cylinders (72) of the rotary printing machine in order to transfer the printing image onto the printing substrate (93);
- determining with the register devices (4, 5) a position of the printing plates with respect to one another,
- the register devices (4, 5) including sensors (4, 91) that determine positions of the printing plate support in the printing machine and
- the register devices (4, 5) providing information based on the positions of the printing plate supports determined by the sensors (4, 91),
- with control signals being derived based on the information (Column 8 Lines 27 – 33) and
- the register device (4, 5) including a control device (5) that generates control signals based on the positions of the printing plate support determined by the sensors (4, 91);
- using the control signals to control drives (84) of the mandrels or of the print cylinders (72) in such a manner that a phase position of the mandrels or of the print cylinders (72) in relation to one another is changed,
- so as to increase a register accuracy of the print (Column 3 Line 27),

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- the printing plate supports each having at least one information carrier (90) from which information is removed using the sensor (4, 91); and
- reading the information automatically and using the information to determine a relative position of the print plate support on the mandrel or on the print cylinder of the rotary printing machine (Column 8 Line 27 – 33),
- with printing plates being used such that the information carrier (90) is arranged outside the printing plate and
- between the print image and an edge of the printing plate support that is turned toward a front end of the mandrel or of the print cylinder (73).

With respect to newly amended Claim 7, Ikeda et al. teach all the limitation of Claim 7 (in Figs 3, and 8 - 9 of Ikeda et al.): process according to claim 6, wherein during the change of the relative phase position of the mandrels or the print cylinders (72), the printing plate supports (73) rest in relation to the mandrels or print cylinders (72) assigned to them.

With respect to newly amended Claim 8, Ikeda et al. teach all the limitation of Claim 8 (in Figs 3, and 8 - 9 of Ikeda et al.): process according to claim 7, wherein the multi-color rotary printing machine is used that comprises the printing plate support (73) each is assigned to the colors to be transferred onto the printing plate, said plate support (73) supporting the a printing plate and

- said printing plate support (73) being attached to the mandrel or cylinder (72) of the rotary printing machine in order to transfer the printing image onto the printing substrate (93),

- the rotary printing machine having the register devices (4, 5) that determine the positions of the printing plates with respect to one another and
- the register devices (4, 5) having the sensors (4, 91) that determine the positions of the printing plate support in the printing machine and
- the register devices (4, 5) providing the information regarding the positions of the printing plate support before, at the start of, or during the printing process in conjunction with the sensors (4, 91),
- based on which the control signals are provided,
- the register devices (4, 5) having the control device (5) that generates the control signals based on the positions of the printing plate support determined by the sensors (4, 91) that controls the drives (84) of the mandrels or the of print cylinders (72) using said control signals in such a manner that the phase position of the mandrels or the print cylinders (72) in relation to one another is changed,
- and the register accuracy of the print increases (Column 3 Line 27),
- with each of the printing plate supports containing that at least one information carrier (90) from which the information is removed using the sensor (4, 91), with the information is read out automatically being suitable for determining the relative position of the printing plate support on the mandrel or on the print cylinder (72) of the rotary printing machine (Column 8 Line 27 – 33), and

- with the information carrier (90) being arranged outside the printing mandrel and between the print image and the edge of the printing plate support that is turned toward the front end of the mandrel or of the print cylinder (73).

Claim Rejections - 35 USC § 103

4. Claims 5 and 12 - 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al. (EP 1205300A1) in view of Yang (US patent No. 5674169).

With respect to newly amended Claims 5 and 12 - 14, Ikeda et al. teach all the limitations of Claims 5 and 12 – 14 except that the information carrier includes a magnetic tape or a sequence of magnetizable individual elements.

Yang discloses in Figs. 173 and 180 as well as columns 67 and 68 a positioning control setting system, where the information carrier comprises a magnetic tape or a sequence of magnetizable individual elements (173-1 and 180-1) and the information stored on the information carrier (173-1 and 180-1) is read out magnetically or electromagnetically (column 68 line 8 – 10).

Therefore it would be obvious to a person of ordinary skill in the art at the time of invention to modify Ikeda et al.'s color rotary printing machine by using Yang's system. In this modification/combination, the information stored on the information carrier comprises a magnetic tape or a sequence of magnetizable individual elements for the purpose of effectively preventing the information carriers from getting smudged and improving the accuracy and the quality of the register process. The modification/combination meets all the limitation of Claims 5 and 12 - 14.

With respect to newly amended Claim 16, the modification/combination meets all the limitation of Claims 16 (in Figs 3, and 8 - 9 of Ikeda et al.): a multi-color rotary printing machine, comprising:

a printing plate support (73) that supports a printing plate and that is assigned to colors to be transferred onto the printing plate, the printing plate support being attached to a mandrel or a cylinder of the machine in order to transfer a print image onto a print substrate (93) during a printing process; and

register devices (4, 5) that determine positions of the printing plates with respect to one another, the register devices (4, 5) including sensors (4, 91) that determine positions of the printing plate support (73) in the machine and the register devices (4, 5) providing information regarding the positions of the printing plate support before, at the start of, or during the printing process in conjunction with the sensors (4, 91) based on which control signals are provided, the register devices including a control device (5) that generates control signals based on the positions of the printing plate support (73) determined by the sensors (4, 91) and with which drives (84) of the mandrels or the print cylinders (72) are controllable using said control signals such that a phase position of the mandrels or the print cylinders (72) in relation to one another is changed and a register accuracy of the print increases,

each printing plate support (73) including at least one information carrier (90) from which information is removed using the sensor (4, 91), the information carrier (90) having a magnetic tape or a sequence of magnetizable individual elements (173-1 and

180-1 and column 68 line 8 – 10 of Yang), with the information that is removed being readable optically, magnetically, or electromagnetically and being automatically adapted for determining the relative position of the printing plate support (73) on the mandrel or on the print cylinder (72), and

the information carrier (90) being arranged outside the printing mandrel and between the print image and an edge of the printing plate support that is turned toward a front end of the mandrel or of the print cylinder (Fig. 9).

The modification/combination meets all the limitations of Claim 16.

With respect to newly amended Claim 15, Ikeda et al. teach all the limitation of Claim 15 except the rectangular shape for the information carrier.

However Yang discloses in Figs. 173: the information carrier shape is rectangular (magnetic tape in column 68 line 16).

Therefore it would be obvious to a person of ordinary skill in the art at the time of invention to modify Ikeda et al.'s color rotary printing machine by using Yang's system. In this modification/combination, the information carrier has a rectangular shape because the read out is easier and more efficient for the purpose of improving the accuracy and the quality of the register process.

The modification/combination meets all the limitations of Claim 15.

With respect to newly amended Claim 17, the modification/combination meets all the limitation of Claim 17 (in Figs 3, and 8 - 9 of Ikeda et al.): the multi-color rotary printing machine according to claim 16, wherein the information carrier (90) has a

rectangular shape with a long side that is substantially aligned in a peripheral direction of the printing plate support (Fig. 9).

Response to Arguments

5. The rejections have been maintained and incorporated by the references from the last Office Action on 11/26/2007. The newly presented Claim 16 has been rejected under the same references of Ikeda et al. and Yang as set forth in Paragraph 4 above in this Office Action.

Applicant's arguments, with regards to Claims 1 – 4 and 6 – 11, filed on 3/18/2008 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., topological position) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Furthermore, before Ikeda calculate the phase difference, they must determine each position of both cylinders. Indeed, Ikeda et al. teach how to determine the positions of the cylinders with respect to one another as claimed in Claim 1. So Ikeda's structural does not teach away any position determining abilities used in Applicant's claimed device.

Thus the Examiner respectfully disagrees with Applicant's these arguments.

6. In response to applicant's argument that Yang's reference is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Yang's reference is reasonably pertinent to the particular problem -- determining, calculating and correcting the position of the subject, with which the applicant's was concerned. Furthermore, Applicant's claimed invention addresses the "registering problem," is no difference than "increasing the register accuracy of the print" and just a part of "increasing the controllability of the entire printing press." Therefore, the combination of Ikeda et al. and Yang has indeed rendered obvious the invention defined by claims 5 and 12 -14.

So the nonanalogous art and intended use arguments are not persuasive.

7. The modification/combination also meets all the limitations of new Claims 15 – 17.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuan L. Chen whose telephone number is 571-270-3799. The examiner can normally be reached on Monday-Friday 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi Arani can be reached on 571-272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Taghi T. Arani/
Supervisory Patent Examiner, Art Unit 4193
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